

REMARKS/ARGUMENTS

Claims 1-11, 14-25, 27, 69-74, 76-85, 87 and 89-93 are currently pending. As noted above, claims 1, 11, 22, 74, and 89 have been amended. Support for these amendments may be found throughout the Specification.¹

Applicants respectfully request reconsideration of this application based on the following remarks.

Claim Rejections – 35 USC § 103

Claims 1, 3-8, 10, 11, 14-16, 18, 19, 21-24, 27, 28, 69-73, 74, 77-82, 85, 89 and 90-93 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Curry et al., (U.S. Publication No. 2003/0169727, hereinafter “Curry”) in view of Crosbie (U.S. Publication No. 2002/0035699, hereinafter “Crosbie”) and further in view of Lee et al., (U.S. Publication No. 2002/0071396, hereinafter “Lee”). Claims 2, 9, 17, 20, 25, 76 and 84 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Curry in view of Crosbie and further in view of Lee as applied to claims 1, 11 and 74 above and further in view of Jiang (U.S. Patent No. 7,058,076, hereinafter “Jiang”). To the extent that the rejections are still applicable to the currently pending claims, they are respectfully traversed.

Claim 1, as amended, recites that at least one infrastructure component communicating with one or more wireless devices using a wireless device over-the-air (OTA) protocol different from Internet protocol (IP), the infrastructure component including at least one logic component facilitating communication between a target wireless device and a communication device, the target wireless device not supporting IP, the logic component being configured to: receive communication device-generated voice data in IP protocol based on an IP address allocated from the infrastructure component and temporarily assigned to the target wireless device based on its location, wherein the infrastructure component functions as a virtual IP endpoint for the target wireless device; transform the voice data in IP protocol to the wireless device OTA protocol without vocoding the voice data, send the voice data in the wireless device OTA protocol to the target wireless device; transform voice data in the wireless device OTA protocol received from

¹ See, e.g., Specification, paragraphs 0014, 0026, and 0028.

the target wireless device to IP protocol without devocoding the voice data, and send the voice data in IP protocol toward the communication device. (Emphasis added)

Similar features are also recited in amended Claims 1, 11, 22, 74, and 89.

The recited subject matter enables a non-IP enabled wireless device to communicate using an infrastructure component acting as a virtual IP endpoint for non-IP enabled wireless device, wherein the infrastructure component can transmit and receive data in accordance with IP principles. In particular, the infrastructure component, functioning as a virtual IP endpoint for the non-IP wireless device, temporarily allocates an IP address for the non-IP wireless device based on the location of the non-IP wireless device. Further, the infrastructure component comprises logic for transforming data in an over-the-air (OTA) protocol to data in voice-over-IP (VOIP) protocol, such that the target wireless device is not required and might not be internally configured to support IP or any other VOIP-related protocols. Further, the recited subject matter avoids so-called tandem vocoding in wireless-to-wireless calls in the prior art systems. That is, the vocoded information received at the virtual IP endpoint is not decompressed, but rather is sent through the infrastructure in IP to another endpoint, where it is converted to OTA protocol and sent to a recipient wireless device, or to another communication device that support IP.

It is respectfully submitted that none of Curry, Crosbie, Lee, and Jiang, when taken along or in combination, teaches or suggests each and every element of amended Claims 1, 11, 22, 74, and 89.

Curry relates to a localized wireless gateway system including base station transceivers and a packet service gateway coupling the transceivers to the public packet data network. As clearly shown in the Abstract and paragraph [0019] of Curry, Curry requires the gateway to compress and decompress voice frequency communication signals. Further, Curry is limited to a two-way voice communication system in a local area. Besides, there is no disclosure in Curry that the IP address being assigned to the target wireless device based on the location of the target wireless device. That is, Curry fails to teach or suggest at least a logic component being configured to: receive communication device-generated voice data in IP protocol, wherein the voice data in IP protocol is received by the infrastructure component based on an IP address allocated from the infrastructure component and temporarily assigned to the target wireless device based on the location of the target wireless device, wherein the infrastructure component functions as a virtual IP endpoint for the target wireless device, transform the voice data in IP

protocol to the wireless device OTA protocol without vocoding the voice data, send the voice data in the wireless device OTA protocol to the target wireless device; transform voice data in the wireless device OTA protocol received from the target wireless device to IP protocol without devocoding the voice data, and send the voice data in IP protocol toward the communication device, as recited in amended Claim 1 and similarly in amended Claims 11, 22, 74, and 89.

Corsbie relates to a Bluetooth-like technology. Before operation, a wireless mobile device 28 is required to initiate a connection with a resource 44 via a gateway service 22. The gateway server provides stored context information, such as an IP address, to the wireless mobile device, wherein the context information is stored after being previously allocated to the mobile device in a previous connection to the WLAN. Once the wireless mobile device 28 connects to resource again, the gateway recognizes a unique identifier of the wireless mobile device 28 and re-assigns the same IP address and configuration to the wireless mobile device 28. Such method of Corsbie, however, is different from the IP address allocation as presently recited. That is, Corsbie does not teach or suggest that the voice data in IP protocol is received by the infrastructure component, wherein the infrastructure component functions as a virtual IP endpoint and is allocated to an IP address, and wherein the IP address is temporarily assigned to the target wireless device based on the location of the target wireless device, as recited in amended Claim 1, and similarly in amended Claims 11, 22, 74, and 89. Indeed, Corsbie merely relates to a gateway server that manages connections in a wireless local area network (WLAN), which is different from a wireless telephone system using a VOIP to communicate voice data between wireless devices that do not support IP. Further, in Corsbie, the wireless mobile devices can only be connected to the gateway server when it is a registered user of the gateway server.

Lee relates to a software-defined vocoder is stored in a network and is dynamically loaded into a handset. That is, the vocoding/devocoding is carried out in the handset, rather in the gateway. Lee fails to address the deficiencies of Curry and Corsbie. For example, Lee fails to teach or suggest, at least, an infrastructure component that includes a logic component facilitating communication between a target wireless device and a communication device, the target wireless device not supporting IP, as recited in the claimed subject matter.

Moreover, Jiang fails to cure the deficiencies of Curry, Corsbie, and Lee.

Based on the above, none of Curry, Corsbie, Lee and Jiang, when taken singly or in combination, teaches or suggests each or every elements of amended Claims 1, 11, 22, 74, and

89. Further, based on the fundamental differences of these prior art from the recited subject matter, e.g. Corsbie relating to a Bluetooth type technology and Lee needing to vocode the data in the handset before sending a data signal to a gateway from the handset, it would not have been obvious for one skilled in the art to combine these prior art references to achieve the recited subject matter without dramatically altering the structures of the prior art.

Accordingly, amended Claims 1, 11, 22, 74, and 89 are allowable over the cited art. Likewise, Claims 2-10, 14-21, 23-25, 27, 69-73, 76-85, 87, and 90-93, which depend from allowable independent claims 1, 11, 22, 74, or 89, are also allowable at least due to their dependency from allowable independent claims and additional features recited therein.

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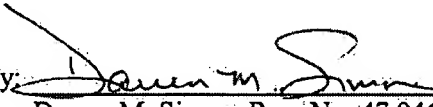
CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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